

Arsenii Ashukha

PhD Candidate at Bayesian Methods Research Group

Student Researcher Samsung AI Center Moscow

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EDUCATION

- PhD Candidate, **National Research University Higher School of Economics**, 2017 - Now
Topic: Probabilistic deep learning, Advisor: Dmitry Vetrov
- MSc in Applied Math and Computer Science, **Moscow Institute of Physics and Technology**, 2017 (with distinction)
Thesis: *Sparsification of DNNs probabilistic framework*, Advisors: Dmitry Vetrov and Alexey Dral
- BSc in Applied Math and Computer Science, **Bauman Moscow State Technical University**, 2015
Thesis: *Bigram anchor words topic modeling*, Advisor: Natalia Loukachevitch

PROFESSIONAL EXPERIENCE

- Student Researcher at **Samsung AI Center** (2018 - Now):
Research on probabilistic deep learning, ensembles of DNNs, uncertainty estimation.
- Student Researcher at **Yandex Research & University of Amsterdam** (2017 - 2018):
Research on Bayesian deep learning for a group-level sparsification and uncertainty estimation.
- Research Intern at **Lab of Deep Learning and Bayesian Methods HSE** (2016 - 2017):
Research on Bayesian deep learning for sparsification and incremental learning.

My responsibility included: selecting research directions, scheduling and executing research agenda, development of machine learning models and algorithms, writing papers.

PUBLICATIONS

- Dmitry Molchanov*, Alexander Lyzhov*, Yuliya Molchanova*, **Arsenii Ashukha***, Dmitry Vetrov
Greedy Policy Search: A Simple Baseline for Learnable Test-Time Augmentation, UAI (2020).
- **Arsenii Ashukha***, Alexander Lyzhov*, Dmitry Molchanov*, Dmitry Vetrov
Pitfalls of In-Domain Uncertainty Estimation and Ensembling in Deep Learning, ICLR (2020).
- Kirill Neklyudov*, Dmitry Molchanov*, **Arsenii Ashukha***, Dmitry Vetrov
Variance Networks: When Expectation Does Not Meet Your Expectations, ICLR (2019).
- Andrei Atanov*, **Arsenii Ashukha***, Kirill Struminsky, Dmitry Vetrov, Max Welling
The Deep Weight Prior, ICLR (2019).
- Andrei Atanov, **Arsenii Ashukha**, Dmitry Molchanov, Kirill Neklyudov, Dmitry Vetrov,
Uncertainty Estimation via Stochastic Batch Normalization, Workshop Track ICLR (2018).
- Kirill Neklyudov, Dmitry Molchanov, **Arsenii Ashukha**, Dmitry Vetrov
Structured Bayesian Pruning via Log-Normal Multiplicative Noise, NeurIPS (2017).
- Dmitry Molchanov*, **Arsenii Ashukha***, Dmitry Vetrov
Variational Dropout Sparsifies Deep Neural Networks ICML (2017).

Full list: scholar.google.com/citations?user=IU-kuP8AAAAJ. *equal contribution.

MISCELLANEOUS

- **Reviewing:**
 - Conferences: ICML (2019, 2020), NeurIPS 2019 (top-50% highest-scoring reviewers), ICLR 2020
 - Workshops: INNf (2019, invertibleworkshop.github.io), BDL (since 2017, bayesiandeeplearning.org)
- **Thesis supervision:**
 - Alexander Lyzhov (MSc, 2020)
 - Andrei Atanov (BSc, 2018, MSc, 2020)
- **Teaching:**
 - Machine Learning at MIPT: TA (2016), Lecturer (2017, 2018)
 - Supervisor of scientific seminars on machine learning at HSE and Yandex (since 2017)
 - TA at **DeepBayes** Summer School on Bayesian Deep Learning (since 2017), <http://deepbayes.ru>
- **Open-source contributions:** See <https://github.com/senya-ashukha>.